

Orchiodes secundiflora O. Kuntze, Rev. Gen. i. 675 (1891).

Epipactis yunnanensis (Schlechter) Hu, comb. nov.

Goodyera yunnanensis Schlechter, Orchideol. Sino-Jap. 60 (1919).

Pholidota yunpeensis Hu, nom. nov.

Pholidota yunnanensis Schlechter in Fedde, Rept. xx. 378 (1924),
non Rolfe.

In naming this species Dr. Schlechter overlooked Rolfe's species published in Journ. Linn. Soc. xxxvi. 24 (1903). Since the latter is a valid species, this new homonym cannot be maintained, hence the proposed change.

Neofinetia Hu, nom. nov.

Finetia Schlechter in Beih. Bot. Centrbl. xxxvi. Abt. ii. 140 (1917),
non Gagnepain.

There is a *Finetia* of the *Combretaceae* published by Gagnepain in Notulae Systematicae of the Herbarium du Muséum de Paris iii. 278 (1916). This homonym should not be maintained, and a new name for this genus and a new combination for the following species are proposed.

Neofinetia falcata (Thunberg) Hu, comb. nov.

Orchis falcata Thunberg, Flor. Jap. 26 (1784).

Limodorum falcatum Thunberg in Trans. Linn. Soc. ii. 326 (1794).

Oeceoclades falcata Lindley, Gen. & Spec. Orch. 237 (1833).

Angraecum falcatum Lindley, Gen. & Spec. Orch. 237 (1833).

Vanda falcata Beer, Prakt. Stud. Orch. 317 (1854).

Oeceoclades lindleyana Regel, Ind. Sem. Hort. Petrop. 43 (1865).

Oeceoclades lindleyi Regel, Gartenfl. 70 (1866).

Angorchis falcata O. Kuntze, Rev. Gen. i. 651 (1891).

Angraecopsis falcata Schlechter, Orchid. 601 (1914).

Finetia falcata Schlechter in Beih. Bot. Centrbl. xxxvi. Abt. ii.
140 (1918).

CYPRIPEDIUM REGINAE IN NEW HAMPSHIRE.

CHARLES SCHWEINFURTH

DURING September 1924, the writer saw a clump of the Showy Lady's Slipper, *Cypripedium reginae* Walt. (*C. hirsutum* of recent American authors, probably not Mill.) in the foot-hills of the White Mountains of New Hampshire. The exact location was a little

swamp in Campton, Grafton County, in about the middle of the state.

No New Hampshire records of this orchid appear in the Gray Herbarium, the Herbaria of Oakes Ames or of the New England Botanical Club, the three largest collections about Boston. But a reference to literature throws some light on the situation. Baldwin, in his "Orchids of New England" cites seven New Hampshire stations viz. Hanover, Lebanon, Franconia, Amherst, Crawford House, South Conway and West Concord. The two former localities are recorded by Jesup and are doubtless still extant, but a station at Concord (perhaps the West Concord locality of Baldwin) is cited as extinct by F. W. Batchelder. Moreover it is absent from Coös County.

What particularly interested the writer was that this orchid, usually a typical calciphile, should occur in a granite country. For certainly the plant association was anything but calcicole. Nearest the orchid grew *Vaccinium canadense*, *Carex crinita* var. *gynandra*, *Galium Claytonii*, *Coptis trifolia*, *Osmunda Claytoniana*, *Oakesia sessilifolia*, *Fragaria virginiana*, *Salix discolor*, *Gaultheria procumbens* and *Lycopus uniflorus*. Other parts of the swamp showed *Picea mariana*, *Epilobium densum*, *Trifolium agrarium*, *Salix sericea*, *Rhododendron canadense*, *Chiogenes hispidula*, *Osmunda cinnamomea*, *Acer rubrum*, the common *Spiraeas* and several common *Solidagos*. Several of these plants such as the *Vaccinium*, *Gaultheria*, *Picea mariana* and *Rhodora* typify the calcifuge group.

C. H. Hitchcock's Geology of New Hampshire shows, however, that a considerable strip of limestone occurs in the Connecticut River Valley some distance to the southwest of Campton. In addition he says that the glacial till from the northwest contains fragments of limestone which are scattered over the gneissic area to the southeast. Also the Franconia mountains, consisting chiefly of syenite, furnish calcium from their lime feldspars and lime micas. So the region appears to have some flavor of calcium. But the station here first recorded seems distinctly worth citing, for the Showy Lady's Slipper is rare and local in this New England State.

Three of the orchid stalks are close together and doubtless rise from a common corm. The fourth, distant several inches, is perhaps a separate plant. Altogether they present a fairly stocky growth, though apparently not so stout as late season plants from Berkshire

County, Massachusetts, or northern Vermont. Perhaps this is caused by an attempt, several years ago, to dig up the plants. When seen by the writer, one stalk had produced a single flower; two, a pair of blossoms; and one, three blooms. Three good capsules were ripening.

This orchid was discovered at the Hebron locality some twenty years ago (circa 1902) by Mrs. Andrew Morgan, through whose courtesy the station on her estate was revealed. Other parts of the same swamp failed to show any other Showy Lady's Slippers.

WELLESLEY FARMS, MASSACHUSETTS.

THE AMPHIBIOUS GROUP OF POLYGONUM, SUBGENUS PERSICARIA.

E. E. STANFORD.

I. ADAPTATION IN POLYGONUM AMPHIBIUM

THE ecological adaptations in the old-world *Polygonum amphibium* L. have been known longer and studied in greater detail than those of the species of corresponding habit in America. The following brief review of the principal literature indicates the scope and results of the chief observations and researches centering round the adaptations of this plant.

P. amphibium is indeed a classic example of adaptability to diverse conditions. The aquatic form is conspicuous in the European water-flora, and is probably the Potamogeton of the ancients. Among pre-Linnean writers the description of Ray¹ has been usually cited as the oldest extant recorded observation of the terrestrial and aquatic forms. Both were described by Linnaeus,² though not directly referred to in the *Species Plantarum* (1753). More recent European writers have described a number of forms, which may apparently be reduced for the present purpose to three, referable to *P. amphibium* var. *natans* Moench, Enum. Pl. Hassk. 28 (1777); var. *terrestre* Leers, Fl. Herborn. 99 (1775); and var. *maritimum* Detharding, Consp. Pl. Magn. Megal. Phan. 33 (1828). The first is the typical floating form, with coriaceous floating or emersed leaves devoid of hair except for the margin, flowering abundantly; the second an upright land-adaptation, with short-petioled rough-hairy leaves, flowering rarely

¹ Ray, *Historia Plantarum*, i. 184 (1686).

² L. Fl. Suec. 115 (1745).